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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,349	10/22/2003	Sujal S. Parikh	14917.0232US01/MS305927.0	6652
27488 7590 04/19/2007 MERCHANT & GOULD (MICROSOFT) P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			EXAMINER HEFFINGTON, JOHN M	
			ART UNIT 2109	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	DELIVERY MODE
3 MONTHS			04/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding:

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/691,349	Applicant(s) PARIKH ET AL.	
	Examiner John M. Heffington	Art Unit 2109	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>01 December 2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to the original filing of October 22, 2003. Claims 1-30 are pending and have been considered below.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2, 4-6, 7-9 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2: The claim makes reference to an "island", however, the term "island" is not defined in the specification. For the purposes of the examination of this application, the term "island" will be assumed to mean an entity that can be considered apart from any other entity, i.e. a subset.

Claim 4 and 23: The claim makes reference to a "queue", however, the term "queue" is not defined in the specification. For the purposes of the examination of this application, the definition of the term "queue" in the Microsoft Press Computer Dictionary will be used.

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Claims 5 and 6: The claims make reference to a "maximal" element, however, the term "maximal" is not defined in the specification. For the purposes of the examination of this application, the term "maximal" will be assumed to mean "the greatest magnitude".

Claims 7 and 8: The claims speak of an element that is "associated" with the maximal element, however, the term associated is not defined in the specification. For the purposes of the examination of this application, the term "associated" will be assumed to mean "residing the same island as".

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Hogan et al. (US 5,414,809).

Claims 1,14,20: Hogan discloses a system, method and computer readable medium wherein:

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- a. a "local data store" (column 3, lines 51-53), "This data is a copy of some subset of data stored in a database system" (column 5, lines 46 and 47) and "The primary concern of a view style is determining the size and position of these graphical objects. Typically, this determination is on the basis of a data field of a data record..." (column 4, lines 26-29) [identifying a first subset of the elements where measurement is desirable] [a first subset of the set of graphical elements requiring measurement] [identifying a first subset of the elements where measurement is desirable]
- b. a "local data store" (column 3, lines 51-53), "This data is a copy of some subset of data stored in a database system" (column 5, lines 46 and 47) and "The primary concern of a view style is determining the size and position of these graphical objects. Typically, this determination is on the basis of a data field of a data record..." (column 4, lines 26-29) [identifying a second subset of the elements where arrangement is desirable] [a second data structure representing a second subset of the set of graphical elements requiring arrangement] [identifying a second subset of the elements where arrangement is desirable]
- c. "The graphical objects have attributes, such as color and size, which also represent data" (column 3, lines 55-56) [executing a first series of operations for measuring the elements comprising the first subset][a first procedure using the first data structure for managing the measuring of elements][executing a first series of operations for measuring the elements comprising the first subset]

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- d. "The computer stores a graphics engine, comprised of a set of rules for displaying graphical objects" (column 1, lines 40 and 41) [and executing a second series of operations for arranging the elements comprising the second subset][second procedure using the second data structure for managing the arranging of elements][executing a second series of operations for arranging the elements comprising the second subset]

Claims 2 and 21: Hogan discloses a system, method and computer readable medium as in claims 1 and 20 above wherein: "This data is a copy of some subset of data stored in a database system" (column 5, lines 46 and 47) [each element in the first subset has associated with it a respective island of elements, and each element in the second subset has associated with it a respective island of elements][each element in the first subset has associated with it a respective island of elements, and each element in the second subset has associated with it a respective island of elements].

Claims 3 and 22: Hogan discloses a system, method and computer readable medium as in claims 2 and 21 above wherein: A "data store" (column 3, lines 51-53) is composed of "data fields" and "data records" (column 4, lines 27-29) [a first data structure to represent the first subset of the elements, and wherein identifying the second subset comprises using a second data structure to represent the second subset of the elements] [first subset comprises using a first data structure to represent the first

subset of the elements, and wherein identifying the second subset comprises using a second data structure to represent the second subset of the elements].

Claims 4 and 23: Hogan discloses a system, method and computer readable medium as in claims 3 and 22 above wherein: a link manager sends messages to the database system so that its data is updated (column 3, lines 60-63) [the first and second data structures are queues][wherein the first and second data structures are queues].

Claims 5, 15 and 24: Hogan discloses a system, method and computer readable medium as in claims 3, 14 and 22 above wherein: data items are sorted (column 22, lines 27-68, column 23, lines 1-15), i.e.:

- a. [identifying a maximal element represented in the first data structure][identifying a maximal element represented in the first data structure][identifying a maximal element represented in the first data structure]
- b. [removing the maximal element's representation in the first data structure][removing the maximal element's representation in the first data structure][removing the maximal element's representation in the first data structure]
- c. [measuring the maximal element; and repeating the listed steps until the first data structure is empty][measuring the maximal element; and repeating the listed steps until the first data structure is empty][measuring the maximal element; and repeating the listed steps until the first data structure is empty].

Claims 6, 16 and 25: Hogan discloses a system, method and computer readable medium as in claims 3, 14 and 22 above wherein: data items are sorted (column 22, lines 27-68, column 23, lines 1-15), i.e.:

- a. [identifying a maximal element represented in the first data structure][identifying a maximal element represented in the first data structure][identifying a maximal element represented in the first data structure]
- b. [removing the maximal element's representation in the first data structure][removing the maximal element's representation in the first data structure][removing the maximal element's representation in the first data structure]
- c. [Arranging the maximal element; and repeating the listed steps until the first data structure is empty][arranging the maximal element; and repeating the listed steps until the first data structure is empty][arranging the maximal element; and repeating the listed steps until the first data structure is empty].

Claims 7, 8, 17, 26 and 27: Hogan discloses a system, method and computer readable medium as in claims 5, 15 and 24 above wherein:

“subtrees” (column 54, line 47), i.e. islands, can be “filtered” (column 59, lines 18-30), i.e. filtering an element if it should be measured,

- a. [an element from the island associated with the maximal element][determining whether an element from an island associated with the maximal element requires

measuring][measuring an element from the island associated with the maximal element]

- b. [determining whether an element from the island associated with the maximal element requires measuring][measuring the element from the island associated with the maximal element if it requires measuring][determining whether an element from the island associated with the maximal element requires measuring].

Claims 9, 18 and 28: Hogan discloses a system, method and computer readable medium as in claims 5, 15 and 24 above wherein: "Nodes are organized into levels of a tree structure, with each node having at most one parent" (column 53, lines 19-21) and "If the user desires to change the data, he may either enter new data in text from or use a pointing device to directly manipulate the appropriate graphical object" (column 3, lines 57-63) [notifying a parent element of the maximal element that the measurements of the maximal element have changed][notifying a parent element of the maximal element that the measurements of the maximal element have changed][notifying a parent element of the maximal element that the measurements of the maximal element have changed].

Claims 10 and 29: Hogan discloses a system, method and computer readable medium as in claims 9 and 28 above wherein: "Nodes are organized into levels of a tree structure, with each node having at most one parent" (column 53, lines 19-21) and "If

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the user desires to change the data, he may either enter new data in text form or use a pointing device to directly manipulate the appropriate graphical object. Either type of input causes local data store to update its copy of the data, and causes link manager to send a message to the database system so that its data is updated" (column 3, lines 57-63) [in response to the notification, a representation of the parent element is placed in the first data structure][in response to the notification in step d), placing a representation of the parent element in the first data structure].

Claim 11: Hogan discloses a system, method and computer readable medium as in claims 3 above wherein: a maximum is used (column 22, line 64) [the number of elements represented in the first data structure cannot exceed a fixed maximum number].

Claim 12: Hogan discloses a system, method and computer readable medium as in claims 3 above wherein: a maximum is used (column 22, line 64) [the number of elements represented in the first data structure cannot exceed a fixed maximum number].

Claim 13, 19 and 30: Hogan discloses a system, method and computer readable medium as in claims 5, 15 and 24 above wherein: "As with other views, you can use filtering to control the subset of data items displayed in the network. However, in Network View, special facilities exist for specifying separate arc and node filters, and for

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determining whether or not to display unconnected graphic objects ("orphans") (column 64, lines 28-34) [d) determining that an orphan element represented on the first data structure is not to be measured; and e) removing from the data structure the representation of the orphan element][d) determining that an orphan element represented on the first data structure is not to be measured; and e) removing from the data structure the representation of the orphan element][d) determining that an orphan element represented on the first data structure is not to be measured; and e) removing from the data structure the representation of the orphan element]

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John M. Heffington whose telephone number is (571) 270-1696. The examiner can normally be reached on Mon - Fri (Alternate Fridays off) 7:30 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim Myhre can be reached on (571) 270-1065. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JMH
4/13/2007



James W. Myhre
Supervisory Patent Examiner